Discussion Topics

- Oak Ridge Reservation in Context
- City of Oak Ridge in Context
- Institutional Control Case Study: East Tennessee Technology Park—Facts and Challenges
- Working Toward Solutions for Institutional Controls Challenges

Oak Ridge Reservation (ORR) in Context

- Federal Government Complex operated by Department of Energy ~ 34,000 acres; 5 major contractors to DOE
- Placed on Superfund National Priorities List in 1989; about 9% of the ORR has legacy contamination
- Cleanup governed by a Federal Facilities Agreement between DOE, State of Tennessee, and the EPA
- "Accelerated Cleanup" project targets are 2006 (Melton Valley); 2008 (East TN Technology Park), and 2015 (Balance of Reservation)
- DOE Office of Legacy Management not leading LTS/ICs

Oak Ridge Reservation (ORR) in Context

- Environmental Management is the largest of DOE programs in Oak Ridge; operates alongside ongoing Science and Defense missions
- DOE established two "regional" boards in mid-1990's—a Site-Specific Advisory Board (SSAB) and a Community Reuse Organization (CRO) dealing with EM and reuse issues; regulators focus community involvement efforts on SSAB
- State of TN, EPA and DOE signed Record of Decision for an on-site CERCLA disposal facility for legacy waste; \$14 million trust fund established for State of TN

City of Oak Ridge in Context

- Oak Ridge is 92 square miles; all of the ORR is within the Oak Ridge City limits; land is tax exempt
- Population has remained stable for years at 27,384
- Fewer than 20% of ORR workers live in Oak Ridge
- Approximately half of the 12,000 housing units is WWII "temporary housing"
- Modified Council-Manager form of government
- Seven Council members; 330 municipal employees

City of Oak Ridge in Context

- City Staff's Work Plan is driven by City's Council's Strategic Plan, based on vision for Oak Ridge to become "an exceptional place for all to live, work, and visit"
- Ambitious goals for 2006-2009 in four major areas:
 - --- Revenue/Stabilized Taxes
 - --- Housing
 - --- Quality of Life/Service Delivery
 - --- Economic Development
- Plan includes increasing number of municipal services provided to DOE and contractors

City of Oak Ridge in Context

City's first encounter with Institutional Controls in mid-1990s did not prove successful:

- City purchased land from DOE to develop a golf course
- Deed restriction prohibited use of groundwater, but was not initially enforced by DOE or regulators; City had no experience with such restrictions
- Work was stopped when developer initiated use of groundwater to irrigate the golf course
- City has spent ~ \$1 million to pump potable water to site for irrigation

<u>Institutional Control Case Study:</u> <u>East Tennessee Technology Park (ETTP)</u>

- ~1200 acre industrial complex with hundreds of structures, including K-25 uranium enrichment facility, undergoing demolition
- ~26 facilities will remain, most transferred to CRO under reindustrialization program
- City of Oak Ridge and DOE are in negotiations to transfer ETTP Fire Station to the City, and to provide water, wastewater, and electric services
- These services currently provided by contractors

Institutional Control Case Study: East Tennessee Technology Park (ETTP)

- Record of Decision for "Zone 2" (~ 800 acres currently "inside the fence") signed in April 2005; classified burial ground, abandoned utility lines to remain in-place
- Examples of Land Use/ Institutional Controls for ETTP:
 - --- Restricted to Industrial Use
 - --- Restriction on groundwater use
 - --- Restriction on excavation below 10 ft in some areas
 - --- Access controls (surveillance patrols & signage)
 - --- Excavation/Penetration permit program
- Nearly all ICs will be in place indefinitely

Long Term Stewardship/ Institutional Control Challenges

- DOE does not have a national LTS policy and implementation plan
- Neither DOE, EPA, nor State of TN have enforced ICs over long time horizons; roles of each unclear
- Unlike Rocky Flats and Weldon Springs, ICs to be enforced at ETTP in an operating, industrial setting
- City of Oak Ridge has little experience in working with ICs in a service delivery setting---maintaining, servicing, constructing underground utilities at ETTP will be complicated endeavor

Long Term Stewardship/ Institutional Control Challenges

- No funding plan in place; reliance on annual appropriations reduces confidence that ICs will be properly funded in perpetuity
- Concern that baseline cleanup levels may not be achieved; SSAB recommended independent verification be conducted at "completion" of accelerated cleanup
- Contamination left onsite may pose risk management challenges for the City of Oak Ridge—e.g. special insurance, workers compensation—indemnification must be protective of local governments

Working Toward Solutions

- All parties must transition to a "customer service" culture; such a shift will require FFA parties to treat City of Oak Ridge as an intergovernmental partner rather than just a stakeholder
- Funding mechanisms must include risk management and technical expertise for City of Oak Ridge
- Clear lines of authority and communication must be established in writing among all parties
- Contingency plan needed to deal with uncertainties inherent in implementing ICs over long time horizon